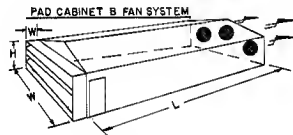


PLAN VIEW-AT VARIOUS LEVELS LEFT TO RIGHT: WATERLINE, FIRST PAD SUPPORT, TOP PAD, CABINET TOP, & END WATER DISTRIBUTION LINE.)



#### PAD CABINET DESIGN - EXAMPLE

##### ASSUME:

- 1) ONE AIR CHANGE PER MINUTE.
- 2) I.E. BLDG. W/L = 200, W=50, H=7.5'

##### CALCULATE:

1. FAN CAPACITY =  $200 \times 50 \times 7.5 = 75,000 \text{ CFM}$ .
2. PAD AREA =  $75,000 \text{ CFM} \times 3 \text{ FT} / 1000 \text{ CFM} = 375 \text{ FT}^2$
3. 1 LEVEL @ 2.5' WIDE @ 50' LONG = 375 FT<sup>2</sup> (OK)
4. INLET VELOCITY =  $75,000 \text{ CFM} \div 3 \times 50 = 500 \text{ FPM} < 600 \text{ (OK)}$
5. PAD WATER FLOW =  $75,000 \text{ CFM} \times 4 \text{ GPM} / 1000 \text{ CFM} = 30 \text{ GPM}$ .
6. NOZZLE PATTERN = 30 GPM @ 50' @ 6 GPM/FT.
7. SELECT: HALF CIRCLE FLAT SPRAY NOZZLES AT 3 ± .03 GPM @ 15 PSI, 1' O.C.



- A) USE  $\frac{1}{4}$ " DRILL B 10-32 MACHINE TAP INTO PVC.
- B) HAND TIGHTEN 3 OR 4 TURNS.

ALTERNATE: ADJUSTABLE FULL OR HALF CIRCLE SHRUB HEADS AT 6 ± .1 GPM @ 15 PSI, 1' O.C.

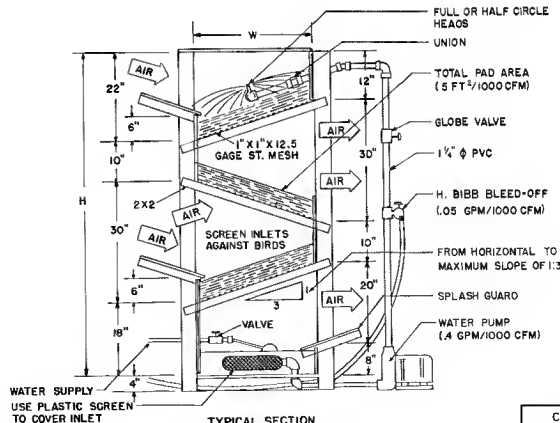


- A) SPACE NOZZLES TO AT LEAST A DOUBLE OVER LAP PATTERN.
- B) DIRECT SPRAY DOWNLINE.

6 PUMP H.P. =  $Q \times W / 2000 = 30 \text{ GPM} \times 59 / 2000 = .89$   
7. BLEED-OFF =  $75,000 \text{ CFM} \times .05 \text{ GPM} / 1000 \text{ CFM} = 4 \text{ GPM}$

##### CABINET LINING SUGGESTIONS

- 1) USE  $\frac{1}{4}$ " OR  $\frac{1}{2}$ " CEMENT ASBESTOS BD. FOR CABINET, SPLASH B ORAIN STORAGE LININGS.
- 2) WATERPROOF W/2" NYLON MESH TAPE TO CORNERS B SEAMS. COAT W/EMULSIFIED ASPHALT. ALTERNATE: USE FIBERGLASS TAPE. COAT W/75 FT<sup>2</sup> POLYETHYLENE RESIN. VENTILATE OR USE GAS MASK. CLEAN BRUSH W/ACETATE.



##### TYPICAL SECTION

SCALE:  $\frac{3}{4}$ " = 1'-0"



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AND  
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EVAPORATIVE COOLING  
PAD CABINET

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